

ABSTRACT

A safety seat comprising a unitary molded shell having a "bucket-seat" shape and a safety restraint system integral to the shell. The molded unitary shell has a bottom portion and a back portion. The shell comprises an inner layer and an outer layer made of a carbon fiber laminate with a core situated between the inner and outer layers. The core comprises aluminum sheeting having a honeycomb-like cross-section. A plurality of attachment plates are selectively located within the shell and disposed between the inner and outer layers. The safety restraint system is fastened to corresponding attachment plates. Support plates located on a non-seating surface of the shell are mated with selected attachment plates. A headrest is selectively attached to the safety seat. The safety seat is secured to structural members within a vehicle by mounting brackets. A method for making the shell and assembling the safety seat are disclosed.